

ATTACHMENT J4

DFSP Grand Forks Petroleum Terminal -  
Electric Distribution System

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Defense Fuel Supply Point  
Electric Distribution System

Utility System Privatization

SP0600-03-R-0058

# J4 DFSP Grand Forks Petroleum Terminal - Electric Distribution System

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## J4.1 DFSP Grand Forks Petroleum Terminal - Overview

The DFSP Grand Forks Petroleum Terminal is located at the intersection of 27th Avenue North and 42nd Street North in the industrial area of Grand Forks North Dakota. The Terminal occupies 11.5 acres, contains 7 industrial facilities totaling 9,538 square feet, and has 6 full-time personnel. The mission of the Grand Forks Petroleum Terminal is the receipt, storage, and issue of bulk petroleum products to support jet fuel requirements for Grand Forks Air Force Base.

## J4.2 Electric Distribution System Description

### J4.2.1 Electric Distribution System Fixed Equipment Inventory

The DFSP Grand Forks Petroleum Terminal electric distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Terminal and Government ownership currently starts to the point of demarcation, defined in part J4.13 of this Section. The system may include, but is not limited to conduit and circuits. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the successful Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

The Contractor shall comply with all applicable federal, state, and local regulations governing the operation of this electrical system.

Specifically excluded from the electric distribution system privatization are:

- ?? Parking Lot Lights
- ?? Street Lights
- ?? Auxiliary Generators
- ?? Fuel Pumps

#### J4.2.1.1 Description

NODAK Rural Electric Cooperative is the current provider. Power enters the Terminal at 480 volts at a NODAK-owned power pole near the Maintenance Shop. On this pole, three NODAK-owned transformers step the power down to 208 volts and then it enters a NODAK-owned master meter (also located on this pole). From there, the line travels to the Administrative Building via a Government-owned 200 linear feet, 3-phase, underground line in 4-inch steel conduit at an estimated depth of 30-40 inches. From there, the remainder of the site is serviced via approximately 2,100 linear feet of

overhead, secondary lines. Poles and pole -mounted transformers located on this 2,100 LF of line are NODAK-owned. Installation personnel indicate the capacity of the current system is adequate for present and future needs.

J4.2.1.2 Inventory

**Table 1** provides a general listing of the major fixed assets for the DFSP Grand Forks Petroleum Terminal electric distribution system. The system will be sold in an "as is, where is" condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

**TABLE 1**  
Fixed Inventory  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Item	Size	Quantity	Unit	Approximate Year of Construction
Underground Circuits	AWG			
3ph, 3w, 15,000 V	#1/0	200	LF	1997
Steel Conduit	4-inch	200	LF	1997
Above Ground Circuits	AWG			
3ph, 3w, 15000V	#1/0	2100	LF	1976
Notes:				
AWG = American Wire Gauge				
LF = linear feet				
ph – phase				
V = volts				
w = wire				

J4.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools Inventory

**Table 2** lists other specialized equipment, **Table 3** lists specialized vehicles, and **Table 4** lists the specialized tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

**TABLE 2**  
Specialized Equipment  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Qty	Item	Make/Model	Description	Remarks
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None				
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**TABLE 3**  
Specialized Vehicles  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Description	Quantity	Location	Maker
None			

**TABLE 4**  
Specialized Tools  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Description	Quantity	Location	Maker
None			

### J4.2.3 Electric Distribution System Manuals, Drawings, and Records

**Table 5** lists the manuals, drawings, and records that will be transferred with the system.

**TABLE 5**  
Manuals, Drawings, and Records  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Qty	Description	Remarks
1	Electrical Utility System Map	Terminal maintains a master plan that contains a single -line drawing of the electrical distribution system.

## J4.3 Specific Service Requirements

The service requirements for the DFSP Grand Forks Petroleum Terminal electric distribution system are as defined in the Section C Description/Specifications/Work Statement. The following requirements are specific to the DFSP Grand Forks Petroleum Terminal electric distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

None.

## J4.4 Current Service Arrangement

?? **Current Provider:** NODAK Rural Electric Cooperative

?? **Estimated Annual Usage:** 350,300 kWh

- ?? **Max Monthly Usage (11 Jan-13 Feb):** 49,152 kWh (only data available was Oct thru Mar 2001/2)
- ?? **Min Monthly Usage (12 Sep-12 Oct):** 13,970 kWh (only data available was Oct thru Mar 2001/2)
- ?? **Peak Demand:** Unknown

## J4.5 Secondary Metering

The Installation may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Clause C.3.

### J4.5.1 Existing Secondary Meters

**Table 6** provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J4.6 below.

**TABLE 6**  
Existing Secondary Meters  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Meter Location (Building#)	Meter Description
None	

### J4.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 7**. New secondary meters shall be installed IAW Paragraph C.13 Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J4.6 below.

**TABLE 7**  
New Secondary Meters  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Meter Location	Meter Description
None	

## J4.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. **Invoice** (IAW G.2). The Contractor’s monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25<sup>th</sup> of each month for the previous month. Invoices shall be submitted to the person identified at time of contract award.

2. **Outage Report.** The Contractor’s monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to the person identified at time of contract award. Outage reports shall include the following information for Scheduled and Unscheduled outages:
- Scheduled:** Requestor, date, time and duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.
- Unscheduled:** Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.
3. **Meter Reading Report.** The monthly meter reading report shall show the current and previous month readings for all secondary meters (if any). The Contractor’s monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15<sup>th</sup> of each month for the previous month. Meter reading reports shall be submitted to the person identified at time of contract award.
4. **System Efficiency Report.** If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. System efficiency reports shall be submitted to the person identified at time of contract award.

**J4.7 Energy Saving Projects**

IAW Paragraph C.3 Requirement, the following projects have been implemented on the distribution system by the Government for energy conservation purposes: None.

**J4.8 Service Area**

IAW Paragraph C.4 Service Area, the service area is defined as all areas within the DFSP Grand Forks Petroleum Terminal boundaries.

**J4.9 Off-Installation Sites**

No off-installation sites are included in the sale of the DFSP Grand Forks Petroleum Terminal electric distribution system.

**J4.10 Specific Transition Requirements**

IAW Paragraph C.13 Transition Plan, **Table 8** provides a listing of service connections and disconnections required upon transfer and **Table 9** lists current system improvement projects.

**TABLE 8**  
Service Connections and Disconnections  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Location	Description
None	

**TABLE 9**  
System Improvement Projects  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Location	Description
None	

### J4.11 Government Recognized System Deficiencies

**Table 10** provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the DFSP Grand Forks Petroleum Terminal electric distribution system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewals and Replacements Plan process and will be recovered through Schedule L-3. Renewal and replacement projects will be recovered through Sub-CLIN AB.

**TABLE 10**  
System Deficiencies  
Electric Distribution System DSPF Grand Forks Petroleum Terminal

Project Location	Project Description
None	

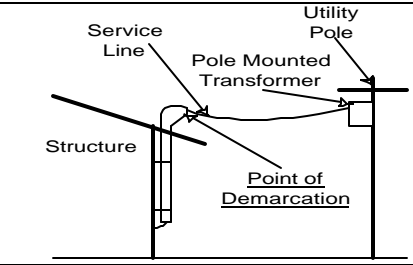
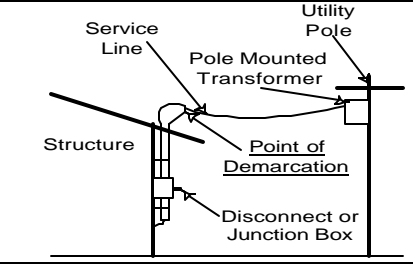
### J4.12 Electrical Distribution System Points of Demarcation

The point of demarcation is defined as the point on the distribution system where ownership changes from the Grantee to the building owner. This point of demarcation will typically be at the point the utility enters a building structure or the load side of a transformer within a building structure. **Table 11** identifies the type and general location of the point of demarcation with respect to the building for each scenario. Regardless of its location, unless stated otherwise, the meter itself will always be privatized to the new owner.

**TABLE 11**  
Points of Demarcation  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal



Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the transformer secondary terminal spade.	Pad Mounted Transformer located outside of structure with underground service to the structure and no meter exists.	<p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the service line extends from the structure to a small square box labeled 'S P'. An arrow points from the label 'Point of Demarcation' to the 'S P' box. Above the 'S P' box, a vertical line goes up to a horizontal line labeled 'Distribution Line'. Below the 'S P' box, a vertical line goes down to another horizontal line labeled 'Distribution Line'.</p>
Down current side of the meter	Residential service (less than 200 amps and 240V 1-Phase), and three phase self contained meter installations. Electric Meter exists within five feet of the exterior of the building on an underground secondary line.	<p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line represents the service line. A small square box labeled 'Meter' is on the line, with an arrow pointing from the label 'Point of Demarcation' to it. To the right of the meter is a small square box labeled 'S P'. Above the 'S P' box, a vertical line goes up to a horizontal line labeled 'Distribution Line'. Below the 'S P' box, a vertical line goes down to another horizontal line labeled 'Distribution Line'. A label 'Pad Mounted Transformer' points to the 'S P' box.</p>
Point of demarcation is the transformer secondary terminal spade.	Three Phase CT metered service.	<p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line represents the service line. A small square box labeled 'Meter' is on the line, with an arrow pointing from the label 'Point of Demarcation' to the 'S P' box. To the right of the meter is a small square box labeled 'S P'. Above the 'S P' box, a vertical line goes up to a horizontal line labeled 'Distribution Line'. Below the 'S P' box, a vertical line goes down to another horizontal line labeled 'Distribution Line'. A label 'Pad Mounted Transformer' points to the 'S P' box.</p>
Secondary terminal of the transformer inside of the structure	Transformer located inside of structure and an isolation device is in place with or without a meter  Note: Utility Owner must be granted 24-hour access to transformer room.	<p>The sketch shows a rectangular box labeled 'Structure' on the left. Inside the structure, a small square box labeled 'S P' is shown. An arrow points from the label 'Point of Demarcation' to the 'S P' box. To the right of the structure, a horizontal line represents the service line. A small square box labeled 'Isolation Device' is on the line. Above the 'Isolation Device' box, a vertical line goes up to a horizontal line labeled 'Distribution Line'. Below the 'Isolation Device' box, a vertical line goes down to another horizontal line labeled 'Distribution Line'. A label 'Service Line' points to the line between the structure and the isolation device.</p>
Secondary terminal of the transformer inside of the structure	Transformer located inside of structure with no isolation device in place.  Note: Utility Owner must be granted 24-hour access to transformer room.	<p>The sketch shows a rectangular box labeled 'Structure' on the left. Inside the structure, a small square box labeled 'S P' is shown. An arrow points from the label 'Point of Demarcation' to the 'S P' box. To the right of the structure, a horizontal line represents the service line. Above the line, a vertical line goes up to a horizontal line labeled 'Distribution Line'. Below the line, a vertical line goes down to another horizontal line labeled 'Distribution Line'. A label 'Service Line' points to the line between the structure and the distribution line.</p>
Point of demarcation is the point where the overhead conductor is connected to the weatherhead.	Electric meter is connected to the exterior of the building on an overhead secondary line.	<p>The sketch shows a rectangular box labeled 'Structure' on the left. A vertical line represents the service line. A small square box labeled 'Meter' is on the line. An arrow points from the label 'Point of Demarcation' to the point where the service line enters the structure. To the right of the structure, a horizontal line represents the service line. A small square box labeled 'Pole Mounted Transformer' is on the line. Above the 'Pole Mounted Transformer' box, a vertical line goes up to a horizontal line labeled 'Distribution Line'. Below the 'Pole Mounted Transformer' box, a vertical line goes down to another horizontal line labeled 'Distribution Line'. A label 'Utility Pole' points to the pole.</p>

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the point where the overhead conductor is connected to the weatherhead.	Pole Mounted Transformer located outside of structure with secondary attached to outside of structure with no meter.	
Point of demarcation is the point where the overhead conductor is connected to the weatherhead.	Service may be overhead or underground. A disconnect switch or junction box is mounted to the exterior of the structure with no meter.	

J4.13 Unique Points of Demarcation

TABLE 12  
Unique Points of Demarcation  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Location	Description
Power enters the Terminal at a utility pole adjacent to the Building #2, the Maintenance Shop, located at the southwest corner of the Terminal	POD is where the power line leaves the NODAK-owned pole and goes underground.

J4.14 Plants and Substations

TABLE 13  
Plants and Substations  
Electric Distribution System - DFSP Grand Forks Petroleum Terminal

Location	Description
None	